CLAIMS

1. Outside unit (1) for receiving waves originating from a satellite, the unit comprising means of amplification (102, 103) and means of transposition (105 to 111) using two transposition frequencies to transpose a satellite reception band (200, 300) to an intermediate frequency band of smaller size than the size of the reception band, characterized in that the two transposition frequencies are such that a part (201, 202) of the satellite reception band is transposed to the intermediate frequency band in an infradyne manner (204) by using one of the transposition frequencies and another part (202, 203) of the satellite reception band is transposed to the intermediate frequency band in a supradyne manner (205) by using the other of the transposition frequencies, and in that the two transposition frequencies are chosen so that there exists an intersection (202) common to the two parts of the band of the satellite reception band which is transposed to the intermediate band with the aid of each of the two oscillators with a spectrum inverted on itself.

2. Outside unit according to Claim 1, characterized in that one of the transposition frequencies is situated at a frequency below the bottom frequency of the satellite reception band from which is subtracted the bottom frequency of the intermediate band and in that the other of the frequencies is situated at a frequency above the upper frequency of the satellite reception band to which is added the base frequency of the intermediate band.

3. Outside unit according to Claim 2, characterized in that one of the transposition frequencies is equal to 9.75 GHz and the other of the frequencies is equal to 13.7 GHz.

4. Outside unit according to Claim 2, characterized in that the maximum spacing between the oscillation frequencies is fixed by the width of the reception band to which is added twice the bottom frequency of the intermediate band and to which is also added 81 MHz.

5. Outside unit according to Claim 4, characterized in that one of the transposition frequencies is equal to 9.72 GHz and the other of the frequencies is equal to 13.73 GHz.

6. Method of receiving a radio signal originating from a satellite in a satellite reception band with the aid of an outside unit (1) having means of amplification (102, 103) and means of transposition (105 to 111) using two transposition frequencies to transpose a satellite reception band (200, 300) to an intermediate frequency band of smaller size than the size of the intermediate band, characterized in that the reception band (300) is separated, for a given polarization, into at least four subbands (301 to 304) of increasing frequencies and in that two adjacent subbands are transposed with the aid of two different transposition frequencies.

7. Method according to Claim 6, characterized in that one of the transposition frequencies is situated at a frequency below the bottom frequency of the satellite reception band from which is subtracted the bottom frequency of the intermediate band and in that the other of the frequencies is situated at a frequency above the upper frequency of the satellite reception band to which is added the base frequency of the intermediate band.

8. Method according to Claim 7, characterized in that one of the transposition frequencies is equal to 9.75 GHz and the other of the frequencies is equal to 13.7 GHz.

9. Method according to Claim 7, characterized in that the maximum spacing between the oscillation frequencies is fixed by the width of the reception band to which is added twice the bottom frequency of the intermediate band and to which is also added 81 MHz.

10. Method according to Claim 9, characterized in that one of the transposition frequencies is equal to 9.72 GHz and the other of the frequencies is equal to 13.73 GHz.